



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,130	04/29/2005	Toru Kawase	2005_0616A	4735

513 7590 06/19/2007
WENDEROTH, LIND & PONACK, L.L.P.
2033 K STREET N. W.
SUITE 800
WASHINGTON, DC 20006-1021

EXAMINER

ABDIN, SHAHEDA A

ART UNIT	PAPER NUMBER
----------	--------------

2629

MAIL DATE	DELIVERY MODE
-----------	---------------

06/19/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/533,130	Applicant(s) KAWASE ET AL.	
	Examiner Shaheda A. Abdin	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 April 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Drawings

3. The drawings are objected to because Fig. 1 does not label the rectangular boxes as required by rule 1.83. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the

changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Huang et al. (US. Patent No: 6388643).

(1) Regarding claim 1:

Huang et al. discloses a plasma display (1) comprising:

a plurality of display electrode pairs (7_1 - 7_{600} , fig. 1) that extend in a row direction and form a display line (column1, lines 40-50),

a plurality of data electrodes (4_1 - 4_{800} , fig. 1) disposed in the direction crossing the display electrode pairs (column1, lines 40-50),

discharge cells (5) formed at intersections of the data electrodes and the display electrode pairs (cells formed intersection of scanning lines and Y-electrodes),

the driving method of (fig. 4, 5 and 6) the plasma display panel comprising:

forming one field time period (frame, fig.4) including a plurality of subfields ($SF_1 - SF_8$) having at least a writing time period (T_{SCN}) and a sustaining time period T_{SUS} , see fig. 6) of an initialization time period (T_{RESET}) the writing time period, and the sustaining time period (column 2, lines 5-15, column 5, lines 30-45),

dividing each display electrode pair ($7_1 - 7_{600}$) into a plurality of blocks (first region- third region) (column 5, lines 8-12) ;

setting starting timings (T_{RESET}) of the subfields of the blocks (first region- third region, fig 6) to be shifted (delayed) so that writing timings of two or more blocks of the plurality of blocks do not coincide with each other (column 3, lines 43-50, and column 5, lines 8-12).

(2) Regarding claim 2:

Huang teaches one field time period including one initialization time period in each of plurality of blocks (each of subfields has one T_{RESET} at the beginning of the scan and sustain operation for the first – third sub-regions sub-frame) (column 4, lines 59-64, fig 6).

(3) Regarding claim 3:

Huang teaches the difference between starting timings of the sustaining

time periods (the different between T_{SUS1} , $T_{SUS1'}$) in adjacent blocks (in first region and second region) of the plurality of blocks is set substantially equal to the length of the writing time period in the adjacent blocks (according to fig. 6, we can see that the different between starting sustain time of first region, second region is substantially same as scanning time $T_{SCN'}$).

(4) Regarding claim 4:

As shown in fig. 1, a plasma display device comprising:

a plasma display panel including:

a plurality of scan electrodes (Y electrode $3_1 - 3_{600}$) and a plurality of sustain electrodes (X electrode 2) forming a plurality of display electrode pairs ($7_1 - 7_{600}$), the display electrode pairs extending in a row direction and forming a display line (column1, lines 40-50, fig 1).

a plurality of data electrodes (41-4800, fig. 1) disposed in the direction crossing the display electrode pairs (column1, lines 40-50, fig 1),

discharge cells (5, fig. 1) at intersections of the data electrodes and the display electrode pairs (cells formed intersection of scanning lines and Y-electrodes), a plurality of scan electrode driving units (plurality of scan electrode driving unit at 15, fig 3) individually corresponding to a plurality of blocks, the plurality of blocks being formed by dividing the display electrode pair (3_1 , 2, fig. 3);

a plurality of sustain electrode driving units (plurality of sustain electrode

Art Unit: 2629

driving unit at 17) individually corresponding to a plurality of blocks, wherein the plasma display device is driven by the driving method of the plasma display panel (according to one of claim 1 to claim 3 as addressed above) .

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's discloser. Lee (US PU. No: 2004/0085262) discloses a method for driving a plasma display panel. Weitbruch et al. (US. Pub. No: 20020018032) discloses an improved addressing scheme for plasma display panel control.

Inquiry.

7. Any inquiry concerning this communication should be directed to the examiner at (571) 270-1673 Monday- Friday 7:30 AM to 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chanh Nguyen, can be reached at (557) 272-7772.

Information regarding the status on an application may be obtained from the Patent Application information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service

Art Unit: 2629

Representative or access to the automated information system, call 800-786-9799 (IN USA OR CANADA) or 571-272-1000.

Any response to this action should be mailed to:

Commissioner of patents and trademarks

Washington, D.C. 20231


Or fax to:

(703)872-9314 (for Technology Center 2600 only)

Shaheda Abdin

05/29/2007

.....


CHANH D. NGUYEN
SUPERVISORY PATENT EXAMINER